

ABSTRACT

An apparatus is provided for the supply of passive electronic components to a chip containing circuitry capable of operating in a communications system. The invention provides a silicon interposer element chip package which includes a silicon substrate and which is capable of carrying one or more IC chips and which does not suffer semiconductor leeching problems. A silicon substrate is formed from a silicon layer and an insulating layer, preferably an oxide. The invention also provides passive circuits within the interposer element oxide layer. The interposer element is then bonded to an integrated circuit chip using flip-chip processing.